Service instruction for displacement pumps Mixon

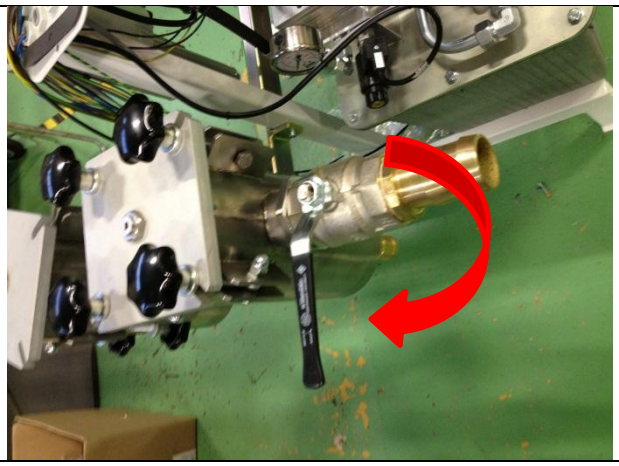
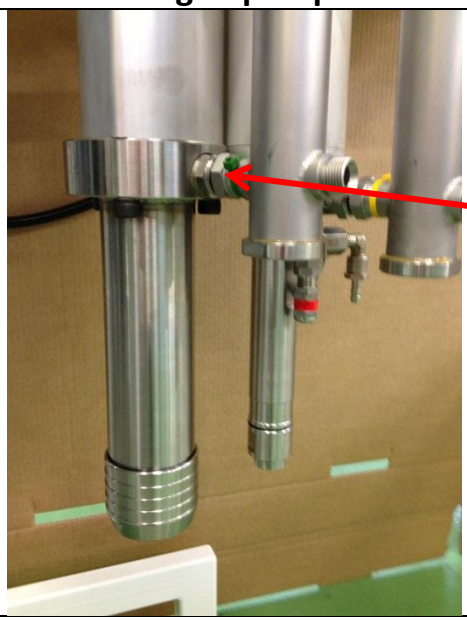
Valid for pump model:	**521-1500**
Version:	1.1

Before you start, make sure you have required tools, this instruction, the required spares and have answered your possible questions related to the service of this pumps with the technical staff of Mixon (+46 303 24 66 60)

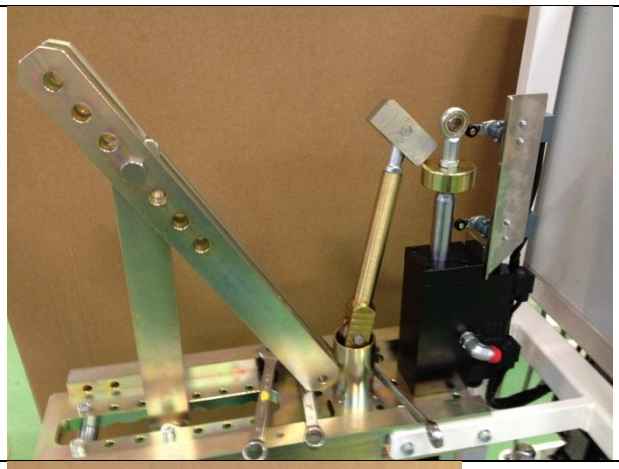
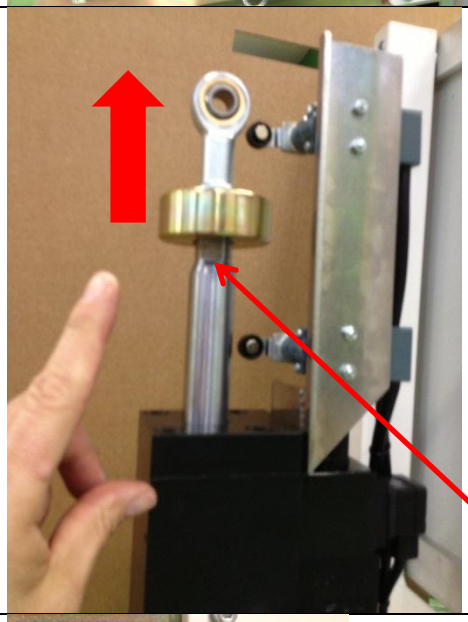
Purpose: **A: Packing set:** **Change of all o-rings, or**
B: Repair set: **Change of all o-rings and ball valves**

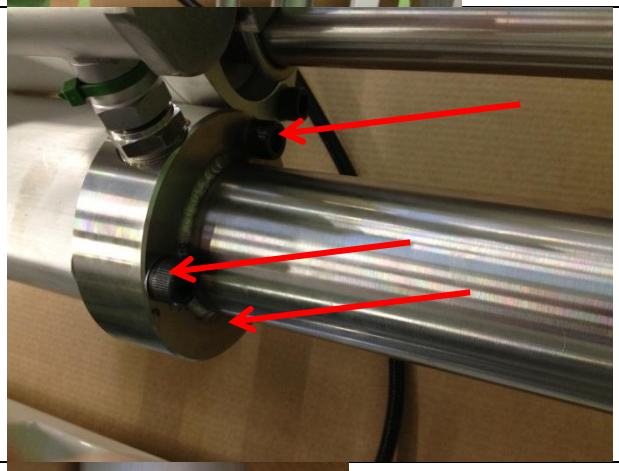
Follow these instructions carefully!

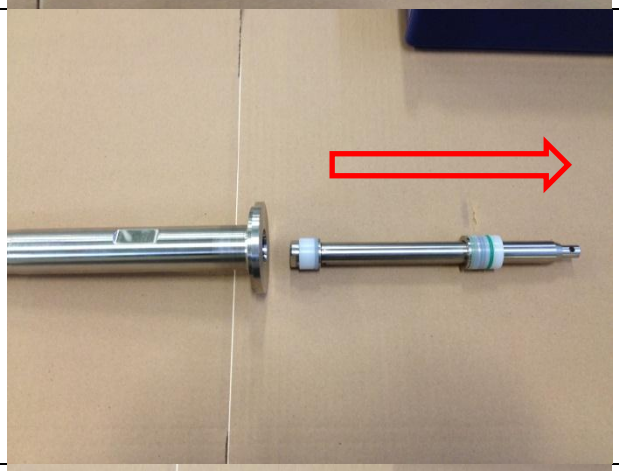
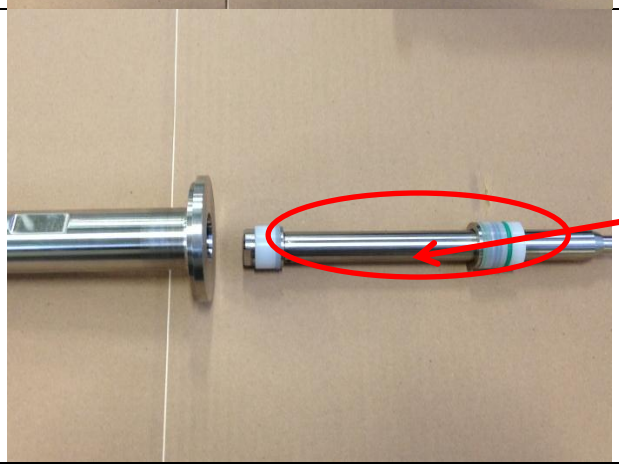
	Before you start	
00		**Switch of electricity of the electrical cabinet and release pressure of the glue system by opening the dosage test and switch off the compressed air!**
0		Tools needed:
1		Tools needed: • Allen key 6, 8, 10mm • Pincers • Screwdriver **NOT** sharp • Bolt 16mm • Wrench 17, 18, 19, 22mm • Large wrench 24-65mm

2		Close inlet valve to both glue- and hardener filter
3		Place bucket under the pumps/hoses to collect the glue hardener in the hose between filter and suction side of the pump, when the hoses are removed.
4		Unscrew the locks of the oil reservoirs on top of the pumps and catch-up the oil (LP-802) from the reservoirs in a bucket.
	Dismantling of pump	
5		Unscrew the pressure hose, including the equalizer from the pump. The hose and the equalizer may stay connected. Release here.

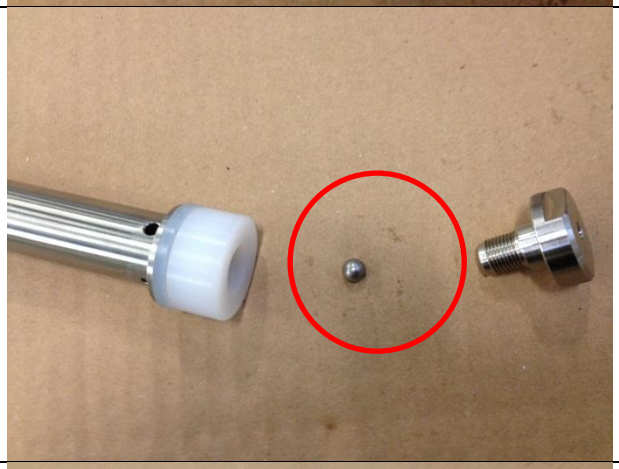
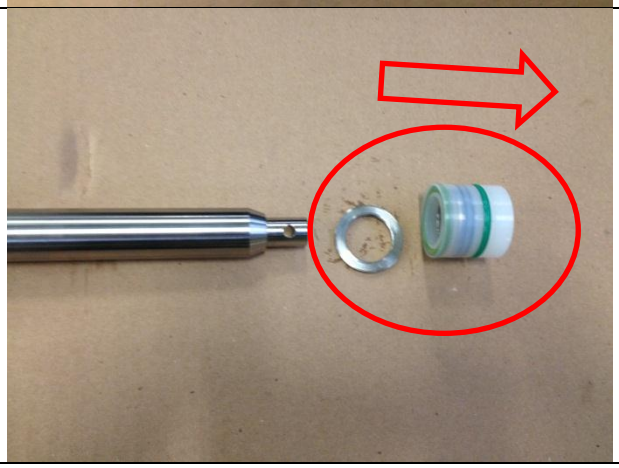
6		Release the screws of the fixation of the hose on the bottom side of the pumps and remove the hose(s). Collect glue and hardener inside the hose in a bucket.
7		Release the screws of the connection slave pump on the leveler arms.
8		Remove the connection piece.
9		Remove the bolts from the top of the hydraulic motor to the leveler arms.

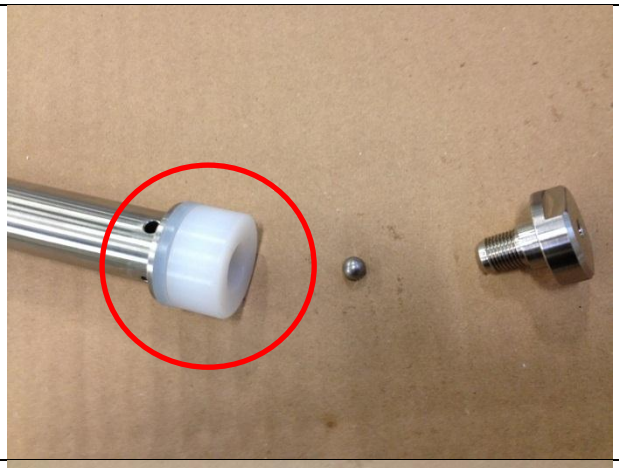
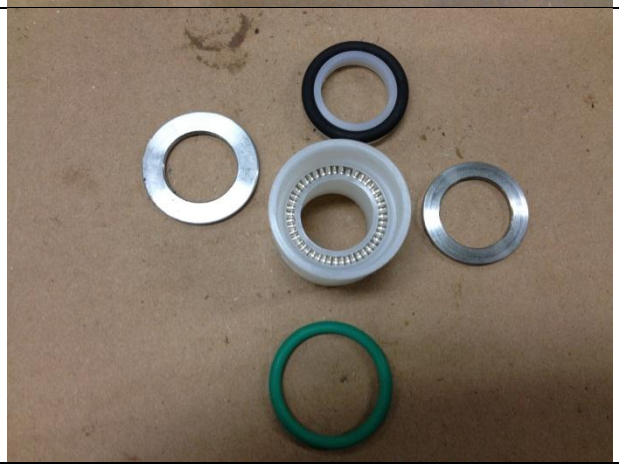
10		Release the arms from the hydraulic motor.
11		Place the axel of the hydraulic motor in highest position (move up). This allows that the top of the piston of the pump can be reached from the opening of the pump distance, see picture 12.
12		Here you can place the wrench to release the pump axel from the axel of the hydraulic motor.

13		Unscrew the piston of the pump from the hydraulic motor. Hold the wrench on the top of the pump (inspection hole oil) in a fixed position and release the axel of the hydraulic motor (move counter clockwise) with the other wrench.
14		Unscrew the 3 bolds on the underside of the pump.
15		Unscrew and release the three bolts.
16		Pump is now ready to be removed.

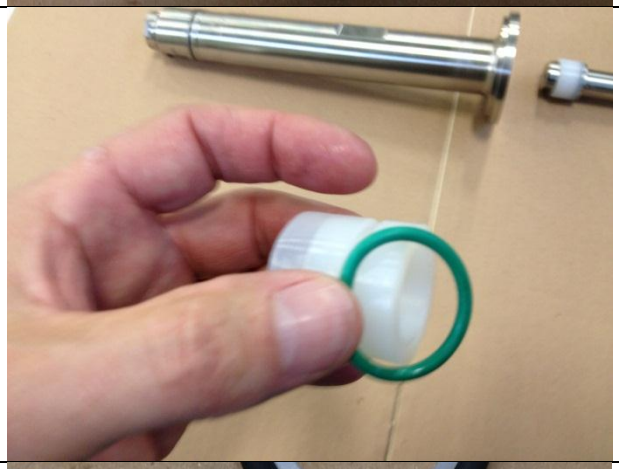
	Remove all wearing parts	
17		Take of the pump from the pump-distance. The washer and O-ring will fall off.
18		Draw the piston out of the cylinder by the power of or hands. Draw in line of the cylinder.
19		Carefully draw the piston out of the cylinder of the pump. This area of the piston may under no circumstances be damaged!!
20		Clean the piston, the cylinder and parts which are in contact-contaminated with glue/ hardener. Use preferably warm water and brush. Most important to follow the recommendations/instructions of the adhesive supplier how to clear their parts in contact with the adhesive. Do not use under any circumstances sharp metal objects to clean or remove (hardened) adhesive.

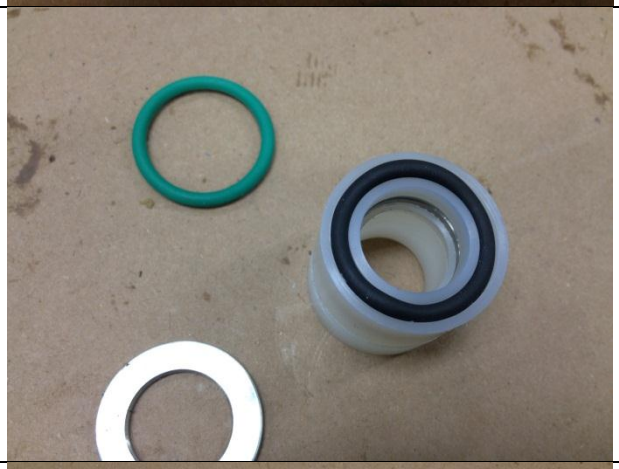
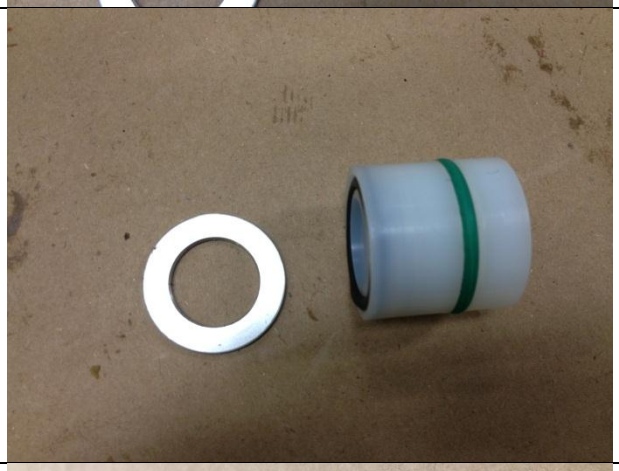
21		Remove the bottom part of the cylinder of the pump. Use large wrench. Remove part clockwise.
22		Un-screwed bottom ball valve house.
23		Remove the ball stop.
24		Take the bottom valve apart. Clean the housing with warm water.

25		Now we focus on the piston of the pump. Start to remove the lower part, the piston hub.
26		Remove the piston hub and washer on top of the hub.
27		Remove the piston hub and washer on top of the hub.
28		We remove all the O-rings from the hub now.

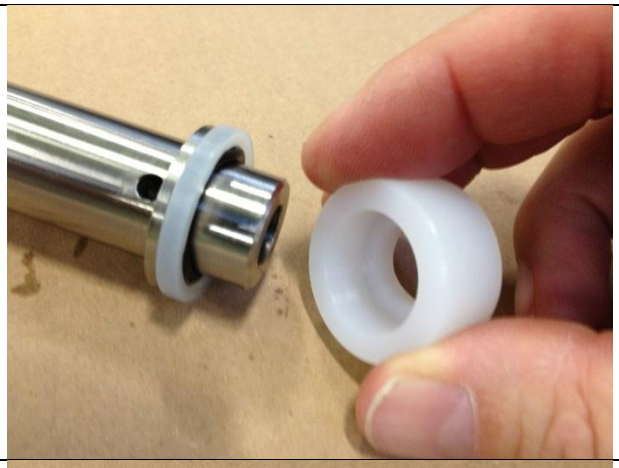
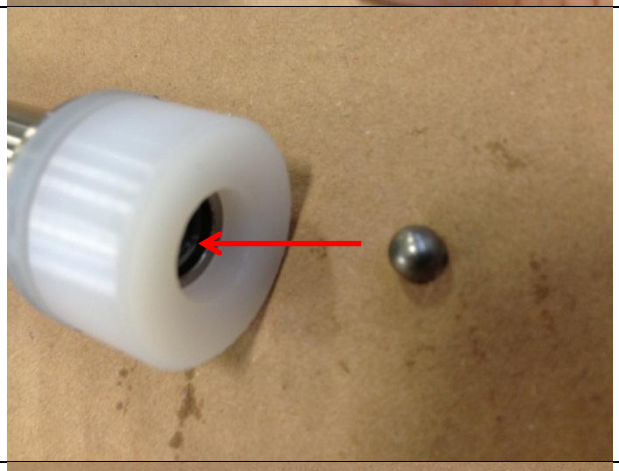
29		
30		Remove all the O-rings/scraper and clean the piston hub after parts are taken off.
31		Now remove the O-rings from the pack-box.
32		Dismantled pack-box.

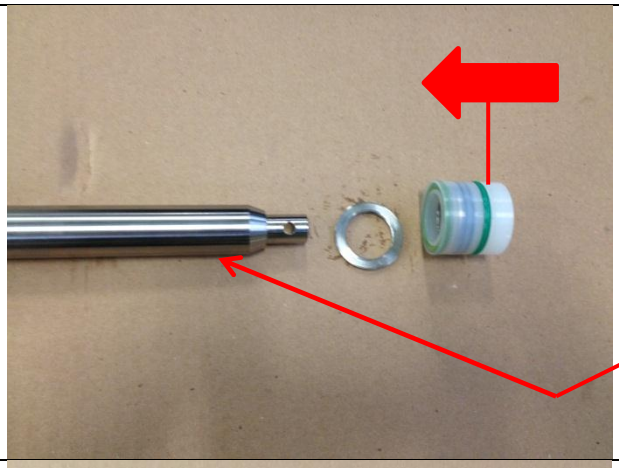
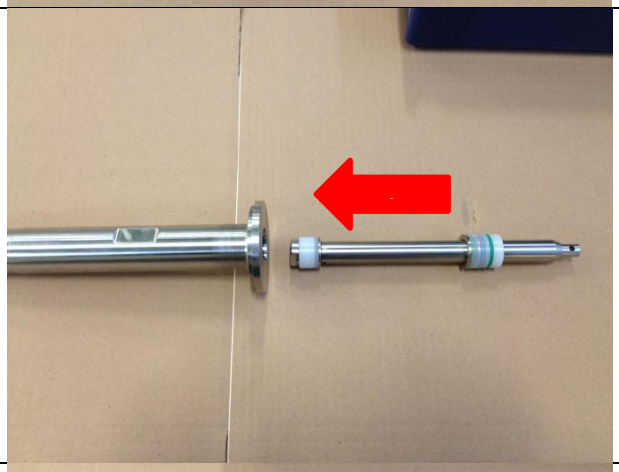
33		Pump is now fully dismantled. Assure all is 100% clean before you start renovating the pump with new wearing parts.
	Repair set	
34		**Packing set** Art. Nr.: 521-1590 All new O-rings and scrapers
35		**Repair set** Art. Nr.: 521-1595 All new O-rings , scrapers and balls.
36		When put the pump together make sure all the parts are put on a clean working area. Never use violence the put the parts together. Never use sharp objects to place parts/ O-rings in place. Always use the appropriate tools to put parts together. In case of any serious doubt, please contact Mixon for professional assistance.
37		Take All the components from the repair set out of the plastic bag and check before you start if all the parts are complete in the set. (Compare with parts you have removed). If set not complete contact Mixon.

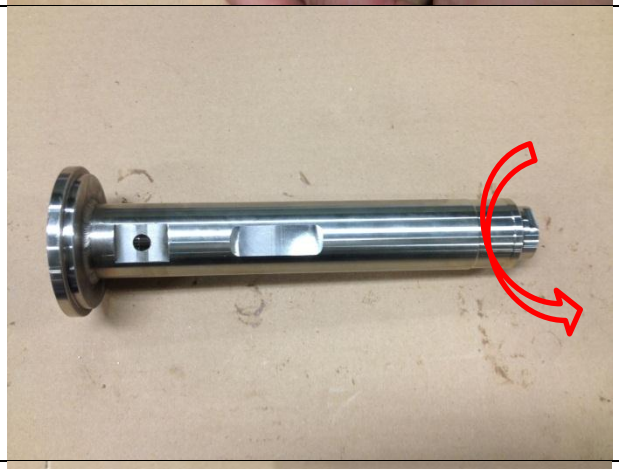
	Renovation, put new parts in place	
38		We start with the renovation of the pack-box.
39		Place the green O-ring over the housing of the pack-box.
40		Place the gasket in the pack- box.

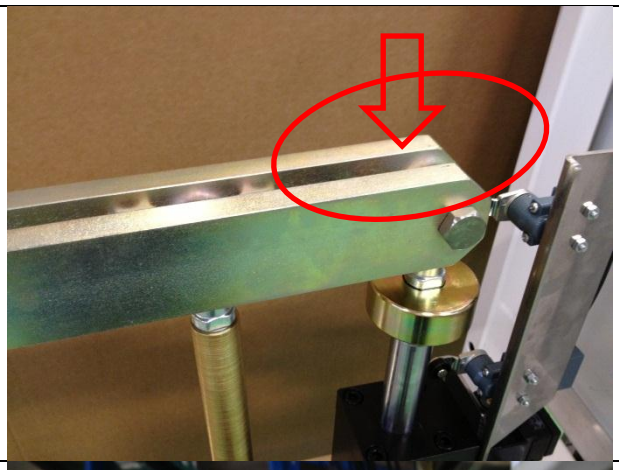
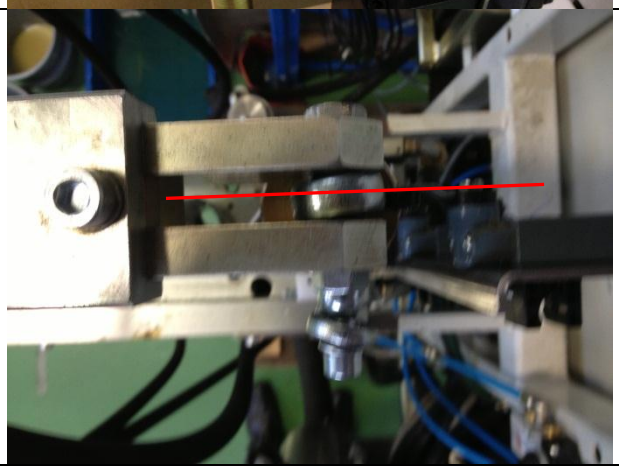
41		Place the metal washer on top of the gasket.
42		Place the black O-ring over the white scraper and place this in the pack-box.
43		Place the green O-ring over the outside of the pack-box in the opening.
44		Place the last metal washer on the top of the pack-box. The pack-box is now renovated,

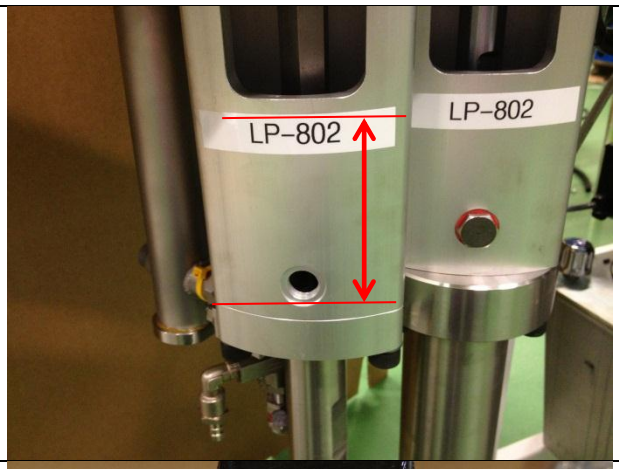
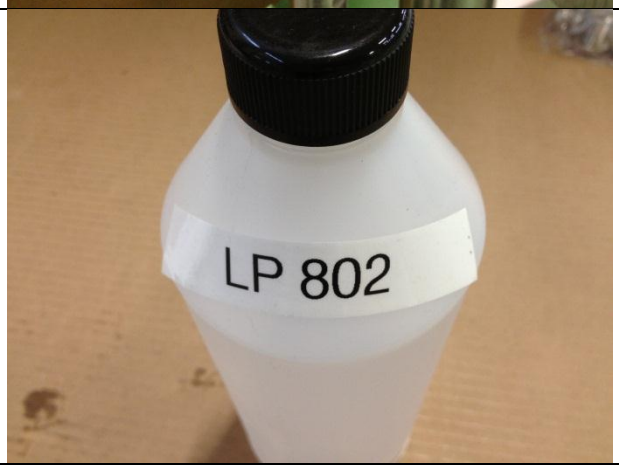
45		Now we renovate the piston hub, all required parts
46		
47		Place the O-ring in the white scraper
48		Place the O-ring/scraper on the piston, towards the support ring

49		Place the hub on the piston.
50		Place the ball in the piston.
51		Screw and lock the valve seat on the piston.
52		Place the pack-box on the other side of the piston.

53		Place first the metal washer and then the pack-box on the piston. Use **little** grease before mounting
54		The piston is now renovated.
55		Place the piston in the cylinder, to make this moment more easy use a bit of LP-802 on the points of contact between piston and cylinder. Make sure piston and cylinder are in line, do not use any other tools than your hands!. Packing box comes easy in place if you use the washer to push the box in the cylinder
56		Piston is now again placed in the cylinder.

57		Now we need to place the new ball in the bottom valve of the pump.
58		Place the ball stop in position after the ball is placed in the housing.
59		Mount ball valve in the cylinder, turn clock-wise
60		¨Pump is now renovated and ready to be build-in the dosage unit.

61		Now use the three bolds
62		Follow steps 2 to 17 in reversed order (start at 17 and work back to point 2.
63		Top view of part picture 64 can be seen on picture 65.
64		Important while connecting the axel of the hydraulic motor on the lever arms!! **Make sure the connection is in line!**

65		Close the plug of the reservoir and fill up with oil LP-802
66		Oil LP-802, purchased from Mixon
67		Check after all is installed again correctly if there are no leaks on the pressure- or suction side. Dense if required.
68	**Done**	

Spare parts for 521-1500 pump:

521-1590	packing set
521-1595	repair set

Company details

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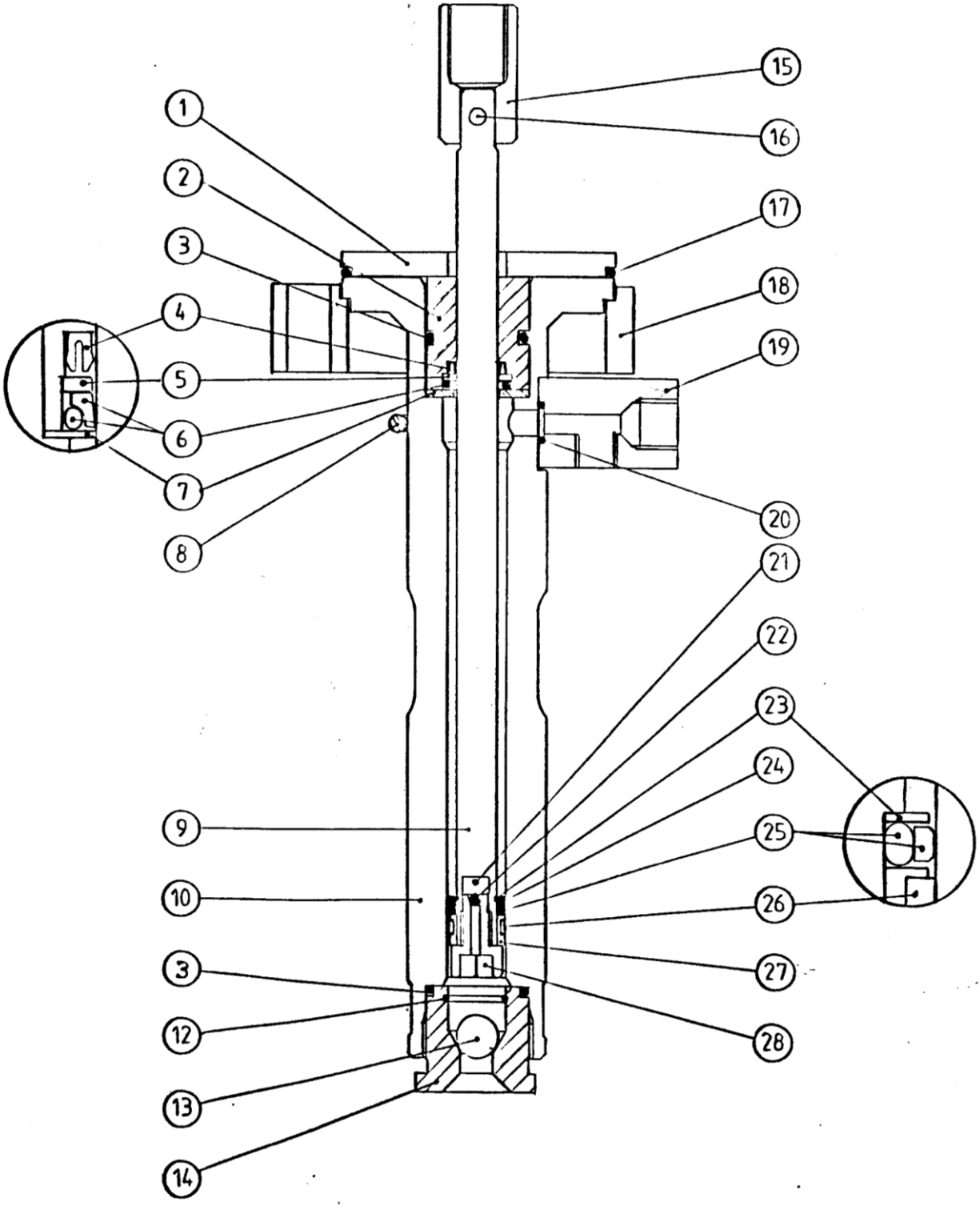
Pump 521-1500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Ref nr / ***Ref. No.***	**Detaljnr /** ***Part No.***	**Antal /** ***Quantity***	**Benämning**	***Description***	***Bezeichnung***
1	521-1805	1	Bricka	*Washer*	*Scheibe*
2**	521-1510	1	Tätningshus	*Tightening casing*	*Dichtungsgehäuse*
3*	111-6244	2	O-ring	*O-ring*	*O-Ring*
4*	116-7160	1	Tätning	*Gasket*	*Dichtung*
5	521-1515	1	Bricka	*Washer*	*Scheibe*
6*	113-7155	1	Tätning	*Gasket*	*Dichtung*
*	111-6310	1	O-ring	*O-ring*	*O-Ring*
7	521-1520	1	Bricka	*Washer*	*Scheibe*
8	521-1025	1	Bygel	*Clamp*	*Bügel*
	151-0308	2	Mutter	*Nut*	*Mutter*
	141-0816 A4	2	Bricka	*Washer*	*Scheibe*
9	521-1535	1	Kolvstång	*Piston rod*	*Kolbenstange*
10	521-1530	1	Cylinder	*Cylinder*	*Zylinder*
12	521-1065	1	Kulstopp	*Ball stop*	*Kugelanschlag*
13**	123-1270	1	Kula	*Ball*	*Kugel*
14**	521-1070	1	Ventilsäte	*Valve seat*	*Ventilsitz*
15	321-1128	1	Anslutningsmuff	*Connection sleeve*	*Anschlussmuffe*
16	133-0530 A4	1	Skruv	*Screw*	*Schraube*
	151-0305	1	Mutter	*Nut*	*Mutter*
17*	111-6396	1	O-Ring	*O-ring*	*O-Ring*
18	521-1005	1	Fläns	*Flange*	*Flansche*
19	521-0010	1	Uttagshus	*Output casing*	*Entnahmegehäuse*
20*	111-6118	1	O-ring	*O-ring*	*O-Ring*
21	520-1240	1	Kulstopp	*Ball stop*	*Kugelanschlag*
22**	123-0635	1	Kula	*Ball*	*Kugel*
23	520-1540	1	Bricka	*Washer*	*Scheibe*
24	521-1545	1	Kolv	*Piston*	*Kolben*
25*	119-7220	1	Tätning	*Gasket*	*Dichtung*
*	111-6154	1	O-ring	*O-ring*	*O-Ring*
26*	520-1555	1	Lager	*Bearing*	*Lager*
28**	645-1630	1	Ventilsäte	*Valve seat*	*Ventilsitz*
	666-9600/12	1	Säkerhetsventil	*Safety valve*	*Sicherheitsventil*
*	521-1590		Packningssats	*Packing set*	*Packungssatz*
**+*	521-1595		Renoveringssats	*Repair set*	*Reparatursatz*
	521-1500		**Pump, kompl, inkl uttagshus o säkerhetsventil**	***Pump, compl, incl., terminal housing and safety valve***	***Pumpe, kompl., einschl. Entnahmegehäuse u. Sicherheitsventil***
	521-1502		**Pump, kompl, exkl uttagshus o säkerhetsventil**	***Pump, compl, excl. terminal housing and safety valve***	***Pumpe, kompl., ausschl. Entnahmegehäuse u. Sicherheitsventil***